## **ABSTRACT**

Disclosed is a copolymer useful for preparing acid gels comprising a copolymer having a copolymer backbone, the copolymer having a general formula:

wherein: (a) A is an H or other terminating group; (b)  $R_1$  is an OH or  $NH_2$ ; (c)  $R_2$  is an O or NH; (d) Z is an integer having a value of from 1 to 4; (e) X and Y are present in a ratio (X:Y) of from 3:2 to 4:1; (f) structures I and II are present as blocks or randomly distributed along the copolymer backbone; and wherein the copolymer has a molecular weight of from about 1,000,000 to about 10,000,000.